

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Cancelled)
2. (Currently Amended) The tube of claim ~~4~~<sup>23</sup>, wherein said sidewall is comprised of a mixture of Type III and Type I collagen.
3. (Original) The tube of claim 2, wherein said mixture contains about 1-10% Type III collagen and about 90-99% Type I collagen.
4. (Cancelled)
5. (Currently Amended) The tube of claim ~~4~~<sup>23</sup>, containing a filling material comprised of Type I collagen, Type IV collagen, or a mixture thereof.
6. (Original) The tube of claim 5, wherein the filling material is comprised of collagen fibers having a substantially longitudinal orientation with respect to said tube.
7. (Original) The tube of claim 5, wherein said filling material is a mixture of Type I collagen and Type IV collagen, and wherein the Type I collagen and the Type IV collagen of said filling material is in a ratio of about 1:1 by weight.
8. (Cancelled)

9. (Original) The tube of claim 5, wherein said filling material further includes a nerve growth stimulant, nerve growth factor or a mixture thereof.

10. (Original) The tube of claim 9, wherein said filling material contains laminin as a nerve growth stimulate.

11. (Currently Amended) The tube of claim ~~4,23~~, wherein said sidewall is derived from collagen membrane tissue, ~~and said membrane tissue is peritoneal tissue.~~

12. (Cancelled)

13. (Cancelled)

14. (Currently Amended) The tube of claim ~~4,25~~, wherein said collagen membrane tissue is peritoneal membrane tissue.

15. (Currently Amended) A method of producing a nerve regeneration tube as claimed in claim ~~4,23~~, comprising:

a) providing ~~a single sheet of collagen sheet~~ material having a compact, smooth outer barrier surface so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, ~~and said sheet material having a soft fibrous surface~~ opposite the smooth barrier surface; and

b) forming said ~~single sheet material~~ into a tube having ~~a sidewall with an outer surface of~~ said compact, smooth outer barrier surface oriented outwardly, ~~said sidewall tube~~ having an inner surface ~~comprised of~~ said ~~soft~~ fibrous surface opposite ~~said smooth barrier surface.~~

wherein said nerve regeneration tube avoids formation of scar tissue which impairs nerve healing.

16. (Currently Amended) The method of claim 15, wherein said sheet of collagen sheet material has two opposite side edges, and the two side edges of said sheet material are brought together to form said tube from said sheet.

17. (Currently Amended) The method of claim 16, further including a step of joining said two side edges together to form said tube from said sheet material.

18. (Cancelled)

19. (Currently Amended) The method of claim 15, wherein said collagen sheet material is formed into said tube with a filling material in said tube comprised of Type I collagen, Type IV collagen or a mixture thereof.

20. (Cancelled)

21. (Cancelled)

22. (Currently Amended) The nerve regeneration tube of claim 1, having a length of about 10-100mm.

23. (New) A nerve regeneration tube for reconnecting nerve ends, the tube being resorbable and having a resorbable sidewall formed with collagen sheet material having a compact smooth outer barrier surface so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, the sheet material further having a soft fibrous inner surface opposite the smooth barrier surface, said tube having a compact smooth outer barrier surface formed with the compact smooth outer barrier surface of said

collagen sheet material so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, said tube further having a soft fibrous inner surface for promoting nerve growth, said soft fibrous inner surface of said tube being formed with the soft fibrous inner surface of said collagen sheet material, said tube having an inner diameter of about 0.5-5mm, and said tube having opposite tube ends, within which tube ends, during use, are nerve ends for reconnection of said nerve ends, wherein said nerve regeneration tube avoids formation of scar tissue which impairs nerve healing.

24. (New) The tube of claim 23 wherein said tube consists essentially of a single sheet of said collagen sheet material.

25. (New) The method of claim 15 wherein said tube is formed so as to have a sidewall which consists essentially of said collagen sheet material, and said tube is formed of a single sheet of said collagen sheet material.

26. (New) A method of reconnecting nerve ends comprising providing a nerve regeneration tube for reconnecting nerve ends, the tube being resorbable and having a resorbable sidewall formed with collagen sheet material having a compact smooth outer barrier surface so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, the sheet material further having a soft fibrous inner surface opposite the smooth barrier surface, said tube having a compact smooth outer barrier surface formed with the compact smooth outer barrier surface of said collagen sheet material so as to inhibit cell adhesion thereon and act as a barrier to prevent passage of cells therethrough, said tube further having a soft fibrous inner surface for promoting nerve growth, said soft fibrous inner surface of said tube being formed with the soft fibrous inner surface of said collagen sheet material, said tube having an inner diameter of

about 0.5-5mm, and said tube having opposite tube ends, within which said tube ends are nerve ends for reconnection of said nerve ends, wherein said nerve regeneration tube avoids formation of scar tissue which impairs nerve healing so as to reconnect said nerve ends while avoiding formation of scar tissue which impairs nerve healing.

27. (New) The method of claim 26, wherein said sidewall is comprised of a mixture of Type III and Type I collagen.

28. (New) The method of claim 27, wherein said mixture contains about 1-10% Type III collagen and about 90-99% Type I collagen.

29. (New) The method of claim 26, wherein said tube contains a filling material comprised of Type I collagen, Type IV collagen, or a mixture thereof.

30. (New) The method of claim 29, wherein the filling material is comprised of collagen fibers having a substantially longitudinal orientation with respect to said tube.

31. (New) The method of claim 29, wherein said filling material is a mixture of Type I collagen and Type IV collagen, and wherein the Type I collagen and the Type IV collagen of said filling material is in a ratio of about 1:1 by weight.

32. (New) The method of claim 29, wherein said filling material further includes a nerve growth stimulant, nerve growth factor or a mixture thereof.

33. (New) The method of claim 26, wherein said sidewall is derived from collagen membrane tissue, and said membrane tissue is peritoneal tissue.